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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,758	11/25/2003	Masahiro Kuroawa	62807-151	3115
20277	7590	05/05/2009	EXAMINER	
MCDERMOTT WILL & EMERY LLP			JARRETT, SCOTT L	
600 13TH STREET, N.W.				
WASHINGTON, DC 20005-3096			ART UNIT	PAPER NUMBER
			3624	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/720,758	<b>Applicant(s)</b> KUROSAWA ET AL.
	<b>Examiner</b> SCOTT L. JARRETT	<b>Art Unit</b> 3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 March 2009.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2,5-10,13-15 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-2,5-10,13-15 and 17-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/06)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

### **37 CFR § 1.105 - Requirement for Information**

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The information is required to identify products and services embodying the disclosed subject matter of system load balancing and identify the properties of similar products and services found in the prior art.

In response to this requirement, please provide the citation and a copy of each publication which any of the applicants authored or co-authored and which describe the disclosed subject matter of system load balancing.

In response to this requirement, please provide the citation and copy of each publication that is a source used for the description of the prior art in the disclosure. For each publication, please provide a concise explanation of that publication's contribution to the description of the prior art.

In response to this requirement, please provide the citation and a copy of each publication that any of the applicants relied upon to draft the claimed subject matter. For each publication, please provide a concise explanation of the reliance placed on that publication in distinguishing the claimed subject matter from the prior art.

In response to this requirement, please provide the names of any products or services that have incorporated the claimed subject matter.

The fee and certification requirements of 37 C.F.R. § 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 C.F.R. § 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 C.F.R. § 1.105 are subject to the fee and certification requirements of 37 C.F.R. § 1.97.

In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is

Art Unit: 3624

unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

This requirement is an attachment of the enclosed Office action. A complete response to the enclosed Office action must include a complete response to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action, which is 3 months.

#### **DETAILED ACTION**

1. This Non-Final Office Action is in response to Applicant's request for continued examination filed March 25, 2009 and applicant's amendments filed March 25, 2009. Currently claims 1-2,5-10,13-15 and 17-22 have been amended and are pending.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 25, 2009 has been entered.

#### ***Response to Arguments***

3. Applicant's arguments, see Paragraphs 2-3, Page 13 and Paragraph 2, Page 14, filed March 25, 2009, with respect to claims 1-2,5-10,13-15 and 17-22 have been fully considered and are persuasive. The 35 U.S.C. 101 rejection of claims 1-2,5-10,13-15 and 17-22 has been withdrawn.

***Title***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: System and Method for Load Balancing Based on Service Level Objectives and Information on the Contents of Start and Finish Processes of Business Services.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 5, 6, 13, 14, 20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 5, 13, and 20, Claims 5, 13, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: what method steps are taken if a step is **not** capable of substituting for the particular step has not been omitted.

For the purposes of examination claims 5, 13, and 20 have been interpreted to read that method steps are taken when a step is **not** capable of substituting for the particular step has not been omitted as follows.

Appropriate correction required.

Regarding Claims 6, 14 and 21, Claims 6, 14 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are what method steps are taken if the omission of the particular step has an effect on already reserved business services.

Art Unit: 3624

For the purposes of examination claims 6, 14 and 21 have been interpreted to read that no method steps are taken when the omission of the particular step has an effect on already-reserved business services.

Appropriate correction required.

***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-2, 5-10,13-15 and 17-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding Claims 1-2 and 5-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As recited, claims 1-2 and 5-8 are directed toward a computer program, software per se. However, under the current guidelines of 35 USC 101, computer software must be tangibly embodied on a computer readable medium, and, when executed by a computer processor, perform the steps of the software. In their broadest reasonable interpretation and in light of the specification, claims 1-2 and 5-8, as recited, can be interpreted to be embodied on abstract mediums such as carrier waves and signals, and therefore not eligible for patent protection. Accordingly, claims 1-2 and 5-8 are not eligible for patent protection.

A method/process claim that fails to meet one of the above requirements is not in compliance with the statutory requirements of 35 U.S.C. 101 for patent eligible subject matter. Here claims 1-2 and 5-8 fail to meet the above requirements because they are not tied to another statutory class of invention.

Nominal recitations of structure in an otherwise ineligible method fail to make the method a statutory process. See Benson, 409 U.S. at 71-72. As Comiskey recognized, "the mere use of the machine to collect data necessary for application of the mental

Art Unit: 3624

process may not make the claim patentable subject matter." Comiskey, 499 F.3d at 1380 (citing *In re Grams*, 888 F.2d 835, 839-40 (Fed. Cir.1989)). Incidental physical limitations, such as data gathering, field of use limitations, and post-solution activity are not enough to convert an abstract idea into a statutory process. In other words, nominal or token recitations of structure in a method claim do not convert an otherwise ineligible claim into an eligible one.

Regarding Claims 9-10 and 13-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As recited, claims 9-10 and 13-15 are directed toward a computer program, software per se. However, under the current guidelines of 35 USC 101, computer software must be tangibly embodied on a computer readable medium, and, when executed by a computer processor, perform the steps of the software. In their broadest reasonable interpretation and in light of the specification, claims 1-2 and 5-8, as recited, can be interpreted to be embodied on abstract mediums such as carrier waves and signals, and therefore not eligible for patent protection. Accordingly, claims 1-2 and 5-8 are not eligible for patent protection.

Regarding Claims 17-22, Claims 17-22 do not utilize the proper computer program product format and effectively recite descriptive material (software) per se and are therefore deemed to be directed to non-statutory subject matter where there is no indication that the proposed software is recorded on computer-readable medium and/or capable of execution by a computer. Examiner suggests that the applicant incorporate

Art Unit: 3624

into Claims 17-22 language that the proposed software is recorded on computer-readable medium and capable of execution by a computer to overcome this rejection.

Examiner suggests that the applicant incorporate into Claims 17-22 language that the proposed method is a computer-implemented (computerized) method and that the method steps are implemented by a computer to overcome this rejection.

Correction required. See MPEP § 2106 [R-2].

### **Conclusion**

This Office action has an attached requirement for information under 37 C.F.R. § 1.105. A complete response to this Office action must include a complete response to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Biliris et al., U.S. Patent No. 6,041,354, teach a load balancing system and method for scheduling processing modules/units amongst a plurality of business services.
- Crowder et al., U.S. Patent No. 6,606,529, teach a system and method for the scheduling, using partial schedules, of requests (business services) to an information processing module/unit.
- Lesaint et al., U.S. Patent No. 6,578,005, teach a system and method for scheduling/allocating resources.
- Mar et al., U.S. Patent No. 6,901,592, teach a system and method for scheduling events.
- Krishnamurthy et al., U.S. Patent No. 6,910,024, teaches a system and method for managing quality of service levels in an network.
- Kundu, U.S. Patent No. 7,243,351, teach a system and method for scheduling a plurality of processing modules.

- Gondhalekar et al., U.S. Patent No. 7,412,532, teaches a system and method for scheduling resources amongst a plurality of processing modules/units.

- SysMaster network performance optimization suite allows NOCs to do more with less (2002), teaches a commercially available system and method to manage service level objectives and load balancing in enterprise networks.

- Wu, QoS-Driven Routing and Resource Scheduling In Wired and Wireless Networks (1999), teaches a system and method for quality of service management and load balancing of a plurality of processing modules/units.

- Venkatasubramanian, An Adaptive Resource Management Architecture For Global Distributed Computing (1998), teaches well known methods/systems for scheduling resources to insure quality of service level objectives are met.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT L. JARRETT whose telephone number is (571)272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley Bayat can be reached on (571) 272-6704. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott L Jarrett/  
Primary Examiner, Art Unit 3624